

## REMARKS

Claims 1 and 10 have been amended as suggested by the examiner to overcome the rejection under 35 U.S.C. § 112.

Claims 10-18 have been amended to conform to the format currently preferred for computer programs.

New Claims 19 and 20 have been added. Support for Claims 19 and 20 may be found in the original claims and on pages 10-11 of the specification.

Claims 1-18 are pending in the application.

By way of this response, Applicant has made a diligent effort to place the claims in condition for allowance. However, should there remain any outstanding issues that require adverse action, it is respectfully requested that the examiner telephone Eric J. Whitesell at (858)350-9257 so that such issues may be resolved as expeditiously as possible.

Response to the rejection under 35 U.S.C. § 112

Claims 1 and 10 stand rejected under 35 U.S.C. § 112(2), allegedly as being incomplete. Specifically, the rejection alleges on page 2 that one of ordinary skill in the art "would not know how to select a cell or cells that belong to one of the common signal domains without first determining whether the selected cell belonged to the common signal domain". To overcome the rejection, step (c) in Claims 1 and 10 has been amended to read: "selecting a cell in one of the common signal domains that is not included in a corresponding list of cells for any of the common signal domains". Applicant submits that the amended claim language clearly apprises one of ordinary skill in the art that the step of determining that a cell is in one of the common signal domains is implicitly included in the step of selecting a cell in one of the common signal domains. Further, every cell in an integrated circuit design that has a clock signal input may reasonably be assumed to belong to a clock signal domain. One of ordinary skill in the art can determine whether a cell has a clock signal input simply by the cell library name. For example, each cell defined in the integrated circuit design as a flip-flop has a clock

signal input.

Response to the rejection under 35 U.S.C. § 103

Claims 1-18 stand rejected under 35 U.S.C. § 103(a), allegedly as being unpatentable over Beausang, U.S. Patent No. 5,828,579 (*Beausang*) in view of Nadeau-Dostie et al., U.S. Patent No. 6,457,161 (*Nadeau*). Applicant respectfully traverses the rejection as follows.

Regarding Claims 1 and 10, the rejection alleges on page 4 that it would be obvious to modify *Beausang* with the signal tracing module in *Nadeau* disclosed in column 7, line 67 to column 8, lines 57 to arrive at Claims 1 and 10. The rejection further alleges that one with ordinary skill in the art would have been motivated to make the proposed modification of *Beausang* by *Nadeau* to provide the necessary identification of scan cells for partitioning of scan cells into subgroups that correspond to a common signal domain in *Beausang*. However, the rejection fails to establish that *Beausang* is lacking in providing the necessary identification of scan cells for partitioning of scan cells into subgroups that correspond to a common signal domain. In fact, the rejection assumes that *Beausang* discloses providing the necessary identification of scan cells for partitioning of scan cells into subgroups as alluded to in step (320) of FIG. 2A. Accordingly, the rejection fails to show that *Beausang* suffers from a lack that the proposed modification would satisfy. Further, the rejection fails to show how *Beausang* might be improved by the proposed modification. Because there is no lack in *Beausang* that the proposed modification would satisfy, and because the rejection fails to show how *Beausang* might be improved by the proposed modification, the rejection fails to establish motivation for making the proposed modification. Because the rejection fails to establish motivation for making the proposed modification, the rejection of Claims 1 and 10 lacks sufficient support to substantiate a rejection under 35 U.S.C. § 103.

The rejection of Claims 2-9 and 11-18 is traversed for the same reasons presented in defense of Claims 1 and 10.

Also, the proposed modification of *Beausang* with the signal tracing module in *Nadeau* does not teach or suggest tracing the net from the clock signal input of the selected cell to a clock signal input of each cell connected to the clock signal input of the selected cell as recited in new Claims 19 and 20.

In view of the above, Applicant respectfully requests a favorable examination and consideration of Claims 1- 20.

The fees for an extension of time and a request for continued examination are attached to this amendment.

Respectfully submitted,  
/ Eric James Whitesell /  
Eric J. Whitesell #38657

Address all correspondence to:

LSI Logic Corporation  
1621 Barber Lane, M/S D-106  
Milpitas, CA 95035-7458

Direct telephone inquiries to:

Eric J. Whitesell  
(858) 350-9257